UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

October 31, 2005

FACT SHEET
PROPOSED NPDES PERMIT NO. NIS040000
COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS
MUNICIPAL SEPARATE STORM SEWER SYSTEM

SUMMARY: The Commonwealth of the Northern Mariana Islands (CNMI) Department of Public Works has applied to the U.S. Environmental Protection Agency, Region 9 for a National Pollutant Discharge Elimination System (NPDES) permit to discharge storm water runoff from the municipal separate storm sewer system (MS4) serving the urbanized portion of the Island of Saipan. NPDES permit coverage for the discharges is required in accordance with the 1987 Amendments to the Clean Water Act (CWA), and final EPA regulations for Phase II storm water discharges (64 Fed. Reg. 68722, December 8, 1999). Region 9 has prepared a draft permit based on the permit application and is proposing to issue the permit. The proposed permit requires the implementation of a storm water management program to control pollutants in the discharges as required by the CWA. Annual reporting is also required to provide information on the status of the implementation of the storm water management program.

PUBLIC COMMENT PERIOD: Comments on the proposed permit must be received or postmarked no later than December 29, 2005. All public comments must be submitted to Lisa Honor, U.S. EPA, Region 9 (WTR-5), 75 Hawthorne Street, San Francisco, CA 94105. Based on the comments received, Region 9 will prepare a response to comments for the final permit.

REQUESTS FOR A PUBLIC HEARING: Interested persons may also request a public hearing pursuant to 40 CFR 124.12 concerning the proposed permit. Requests for a public hearing must be sent or delivered in writing to Lisa Honor at the above address for EPA, Region 9 prior to the close of the comment period. Requests for a public hearing must state the nature of the issues proposed to be raised in the hearing. Pursuant to 40 CFR 124.12, the Regional Administrator shall hold a public hearing if he finds, on the basis of requests, a significant degree of public interest in the proposed permit. If the Regional Administrator decides to hold a public hearing, a public notice of the date, time and place of the hearing will be made at least 30 days prior to the hearing. Any person may provide written or oral statements and data pertaining to the proposed permit at the public hearing.

FOR FURTHER INFORMATION CONTACT: For further information on the proposed permit, contact Eugene Bromley, EPA, Region 9 (WTR-5), 75 Hawthorne Street, San Francisco, CA 94105 (415) 972-3510.

ADMINISTRATIVE RECORD: The proposed permit and other related documents in the administrative record are on file and may be inspected any time between 8:30 a.m. and 4:00 p.m., Monday through Friday, excluding legal holidays, at the addresses shown below.

U.S. EPA, Region 9
CWA Standards and Permits Office (WTR-5)
75 Hawthorne Street
San Francisco, CA 94105-3901

SUPPLEMENTARY INFORMATION

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I. Background

Following below is an overview of the basic requirements of Phase II of the NPDES storm water permit program and the requirements of the proposed permit. Additional information may be obtained at EPA's NPDES website at http://cfpub.epa.gov/npdes/stormwater/swphases.cfm

A. Statutory and Regulatory Background

The 1987 Water Quality Act (WQA) amended the Clean Water Act (CWA) by adding section 402(p) which requires that NPDES permits be issued for various categories of storm water discharges. Section 402(p)(2) requires permits for the following five categories:

1. Discharges permitted prior to February 4, 1987;
2. Discharges associated with industrial activity;
3. Discharges from large municipal separate storm sewer systems (MS4s) (systems serving a population of 250,000 or more);
4. Discharges from medium MS4s (systems serving a population of 100,000 or more, but less than 250,000); and
5. Discharges judged by the permitting authority to be significant sources of pollutants or which contribute to a violation of a water quality standard.

The five categories listed above are generally referred to as Phase I of the storm water program. For CNMI, there are no large or medium MS4s and therefore no previous MS4 permits have been issued for this area. However, general NPDES permits have been issued for storm water discharges associated with industrial activity in CNMI.

Section 402(p)(6) of the CWA also requires permitting for certain additional storm water discharges (Phase II of the storm water program) after considering the results of two studies which are required by section 402(p)(5) of the CWA. These studies address the nature of the pollutants in the Phase II storm water discharges (EPA, 1995) and the available control mechanisms for the pollutants (EPA, 1994). Based on these studies and other available information, final Phase II storm water regulations were promulgated by EPA on December 8, 1999 (64 Fed. Reg. 68722). These regulations set forth the additional categories of discharges to be permitted and the requirements of the program. The additional discharges to be permitted are:

1. Small MS4s (see section I.B below).
2. Small construction sites (sites which disturb one to five acres); sites of five or more acres are covered by Phase I.
3. Industrial facilities owned or operated by small municipalities which were temporarily exempted from the Phase I requirements in accordance with the provisions of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991.

The MS4 serving the urbanized portion of the Island of Saipan is considered a small MS4 and

must be permitted in accordance with the Phase II regulations. Phase II industrial facilities and construction sites have already been permitted via general permits in CNMI.

The 1987 WQA also clarified that storm water discharges associated with industrial activity are subject to the BAT/BCT requirements of the CWA and applicable water quality standards. For MS4s, the WQA specifies a new technology-related level of control for pollutants in the discharges - control to the maximum extent practicable (MEP). However, the WQA is silent on the issue of compliance with water quality standards for MS4 discharges. In September, 1999, the Ninth Circuit Court addressed this issue and ruled that water quality standards compliance by MS4s is discretionary on the part of the permitting authority (Defenders of Wildlife v. Browner, No. 98-71080). Section II.F.2 of this fact sheet discusses the permit requirements which are proposed to address this issue.

B. Small MS4s

The following four categories of small MS4s are potentially subject to permitting under Phase II of the storm water program (40 CFR 122.32):

1. MS4s operated by municipalities in urbanized areas as defined by the Census Bureau based on the 1990 or 2000 census. An urbanized area is basically a core city and urban fringe with a population of 50,000 or more.
2. Designated MS4s operated by municipalities which are outside urbanized areas which have a population of 10,000 or more and population density of 1,000/mi^2. Permitting of these MS4s is required on a case-by-case basis based on factors such as rapid growth, high population density or adverse water quality impacts.
3. MS4s which contribute substantial pollutant loads to regulate MS4s through interconnections.
4. MS4s designated by petition.

Based on the 2000 census, roughly the southern two thirds of the Island of Saipan met the criteria for an urbanized area, and is thus subject to permitting in accordance with the first category of small MS4s described above.

C. Environmental Impacts of Discharges from Small MS4s

The 1987 decision by Congress to require NPDES permitting for the storm water discharges discussed above was based on a growing awareness of the environmental significance of nonpoint sources of pollutants. For example, EPA's report entitled "National Water Quality Inventory: 2000 Report" (EPA, 2002) shows that nonpoint sources, including storm water runoff, are the leading causes of existing water quality impairments.

The Nationwide Urban Runoff Program (NURP), which was sponsored by EPA in the years 1978 through 1983, also showed that storm water runoff is a significant source of pollutants (EPA, 1983). The study identified 77 priority toxic pollutants in storm water runoff

discharged from residential, commercial and light industrial areas. Of these toxic pollutants, heavy metals such as copper, lead and zinc were detected most frequently and at levels of greatest concern. Other pollutants of concern in storm water runoff include suspended solids, oil and grease, nutrients, bacteria and litter and trash.

For Saipan, the CNMI Department of Environmental Quality's 2004 Water Quality Assessment Report (CNMI DEQ, 2004) provides an assessment of the current status of water quality in CNMI and the environmental significance of storm water discharges in CNMI. The report shows that urban runoff is a significant contributor of pollutants (such as nutrients and bacteria) to waterbodies in CNMI. The CNMI permit application also notes that a number of coastal waters around Saipan are considered impaired under section 303(d) of the CWA, and that storm water runoff is one of the causes of the impairments.

D. Permitting Options for Small MS4s

The Phase II regulations provide three options for storm water permitting for small MS4s:

1. Apply for coverage under a general permit (if one were to be issued).
2. Apply for an individual permit.
3. Seek coverage as a co-permittee under an existing Phase I MS4 permit via a permit modification.

On September 18, 2002 (67 Fed. Reg. 58802), Region 9 proposed a general permit for small MS4s in the State of Arizona (including Indian lands), the U.S. Pacific Island territories (including CNMI), and Indian lands in the States of California and Nevada. However, on December 5, 2002, the State of Arizona was authorized by Region 9 to administer the NPDES permit program on non-Tribal lands. Most of the small MS4s which would have been covered by the proposed general permit became subject to another general permit issued by the State of Arizona Department of Environmental Quality. Only a small number of small MS4s (including CNMI) remained under the jurisdiction of the Region 9, and Region 9 elected to issue individual permits for these remaining MS4s rather than finalize the general permit which had been proposed on September 18, 2002. On October 25, 2004, the CNMI Department of Public Works submitted its individual MS4 permit application for Saipan to Region 9.

II. Summary of Permit Conditions

A. Storm Water Management Program (SWMP) Requirements

The individual permit application which was submitted on October 25, 2004 included a proposed storm water management program (SWMP) in accordance with the requirements of 40 CFR 122.33(b)(2)(i). Region 9 provided comments to the CNMI Department of Public Works on a previous SWMP dated September 30, 2004, and the October 25, 2004 SWMP was revised to reflect the Region 9 comments.

The SWMP is the means through which dischargers comply with the CWA's requirement to control pollutants in the discharges to the maximum extent practicable (MEP), and comply with the water quality related provisions of the CWA. EPA considers MEP to be an iterative process in which an initial SWMP is proposed and then periodically upgraded as new BMPs are developed or new information becomes available concerning the effectiveness of existing BMPs (64 Fed. Reg. 68754). The Phase II regulations at 40 CFR 122.34(b) set forth the following six minimum pollution control measures to be included in SWMPs.

1. Public Education and Outreach on Storm Water Impacts.
2. Public Involvement/Participation.
3. Illicit discharge detection and elimination.
4. Construction Site Storm Water Runoff Control.
5. Post-Construction Storm Water Management in New Development and Redevelopment.
6. Pollution Prevention/Good Housekeeping for Municipal Operations.

For each minimum measure, the regulations specify certain required elements, and also recommendations for a SWMP; Appendix B to this fact sheet provides a list of the requirements of the regulations and the guidance for each minimum measure. EPA also developed a compliance assistance guide (EPA, 2000) which provides additional assistance to small MS4s in complying with Phase II and developing appropriate SWMPs.

Region 9 believes that the proposed SWMP of October 25, 2004 is consistent with the regulations and guidance and the proposed permit requires that the permittee implement the proposed SWMP. To further ensure that the permit requirements are fully consistent with the regulations, the proposed permit also includes the required elements for each minimum measure.

EPA has developed a menu of BMPs for small MS4s which is available on EPA's website at http://www.epa.gov/npdes/menuofbmps/menu.htm to assist in the development of SWMPs. The menu provides detailed descriptions of BMPs which may be included in SWMPs to satisfy the requirements of the six minimum measures. As noted earlier, Region 9 expects SWMPs is be updated periodically in complying with MEP. The menu of BMPs provides the CNMI Department of Public Works with additional information on BMPs which may be appropriate to add to the SWMP in the future.

Phase I MS4s in other areas of Region 9 (such as Hawaii and California) have been under permit for over ten years now, and have acquired considerable experience in storm water quality management. In implementing the SWMP in the future, Region 9 would recommend that the permittee review the programs and experiences of Phase I MS4s (many of which have websites which describe their programs) to gain additional insights in storm water quality management.

B. Measurable Goals

The Phase II regulations at 40 CFR 122.34(d)(1) require that measurable goals be included with the SWMP which is submitted by small MS4s with their permit application. Measurable goals are quantifiable measures of progress in implementing the various BMPs which comprise a SWMP. Measurable goals may consist of specific one-time only objectives such the development of a storm water ordinance by a certain date, or they may consist of numeric objectives for the frequency of implementation of a given BMP (such as the frequency of street sweeping or catch basin cleaning). Measurable goals may also consist of specific objectives for water quality improvement over a given time period.

Measurable goals were included in the SWMP which was proposed by the CNMI Department of Public Works for each of the minimum measures. Region 9 believes that the measurable goals are appropriate for the BMPs which were proposed. The measurable goals become permit requirements once the permit has been issued.

Measurable goals were included in the Phase II regulations to ensure that the public can better evaluate the level of effort proposed by MS4s in controlling pollutants in the discharges and to ensure accountability of the MS4s. A measurable goals guidance is available on EPA's website at http://www.epa.gov/npdes/stormwater/measurablegoals/index.htm.

C. Non-Storm Water Discharges

As noted above in section II.A, a SWMP must include an ongoing program of various activities related to the prevention of illicit connections and illegal dumping. The regulations also clarify that although the permittee must address all types of unpermitted non-storm water discharges to the MS4, certain types of minor discharges which are listed at 40 CFR 122.34(b)(3)(iii) need not be addressed unless the permittee determines that they are a significant source of pollutants. The basic regulatory requirements regarding the prohibition of unpermitted non-storm water discharges are included in Part I.C of the proposed permit. Additional requirements are found in Part II.B.3 (SWMP requirements).

Part I.C.3 of the proposed permit also provides that the permittee may develop additional categories of non-storm water discharges which will not be addressed as illicit discharges. The discharges must reasonably be expected not to be significant sources of pollutants, based on information available to the permittee or the controls placed on the discharges. This provision is being added to the permit since the list at 40 CFR 122.34(b)(3)(iii) may not be comprehensive.

D. Historic Preservation

The National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of Federal undertakings, including undertakings on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. The term "Federal undertaking" is defined in the NHPA regulations to include any project, activity, or

program under the direct or indirect jurisdiction of a Federal agency that can result in changes in the character or use of historic properties, if any such historic properties are located in the area of potential effects for that project, activity, or program (36 CFR 802(o)). Historic properties are defined in the NHPA regulations to include prehistoric or historic districts, sites, buildings, structures, or objects that are included in, or are eligible for inclusion in, the National Register of Historic Places (36 CFR 802(e)).

Federal undertakings include EPA's issuance of NPDES permits. The permit application submitted by the CNMI Department of Public Works includes a list of 17 sites on Saipan which are included on the National Register of Historic Places. However, Region 9 believes there would be no effect on the historic properties from the permit issuance. The proposed permit does require the implementation of the SWMP which includes various BMPs to control pollutants in the discharges. Most of the BMPs consist of source control and pollution prevention activities which focus on preventing pollutants from being discharged in storm water runoff; these BMPs would have no effect on historic properties. Although structural controls may also be necessary for some new developments, such projects are reviewed by the CNMI Historic Preservation Office (as described in the SWMP) to ensure that there are no effects on historic properties. Region 9 believes that the existing procedures will protect historic properties and accordingly the permit does not include any special provisions related to historic preservation.

E. Reviewing and Updating the SWMP

Part III.D.2 of the permit provides a means in which the permittee may propose changes to the SWMP during the term of the permit. As noted previously in section II.A, MEP is intended to be an iterative process in which SWMPs are periodically updated and improved based on new information. The permittee must also consider whether the SWMP needs to be updated when the annual report (Part IV.C of the permit) is prepared.

Part III.D.3 of the proposed permit also provides that Region 9 may reopen and modify the permit to require changes to the SWMP if it is determined not to meet one or more of the minimum requirements of the permit. This provision ensures that Region 9 may require upgrades or modifications to the SWMP if it proves to be deficient, and to ensure that the SWMP is adequate to meet the objectives of the permit. The proposed permit also provides that the permittee may propose alternate SWMP changes to meet the objectives of any requested modifications by Region 9.

F. Special Conditions

1. Total Daily Maximum Load (TMDL) Allocations Established After Permit Issuance

The proposed permit (Part III.A) provides that if a TMDL is approved for any waterbody into which the permittee discharges and if that TMDL includes a wasteload allocation for a parameter likely to be discharged by the MS4, EPA may reopen and modify the permit to include

requirements of the TMDL and/or its associated implementation plan. Monitoring of the discharges may also be required, as appropriate, to ensure compliance with the TMDL. NPDES regulations at 40 CFR 122.44(d)(1)(vii) require that NPDES permits be consistent with the requirements of TMDLs.

EPA's authority to include any future TMDL-related requirements in a future permit modification reflects the current activity on the part of states and EPA to develop and implement TMDLs for various waterbodies. Although there are no established TMDLs which would apply to the Saipan discharges at this time, this could change in the future. As noted above in section I.C of the fact sheet, the receiving waters for many of the discharges are listed as impaired for a number of pollutants. Part III.A of the proposed permit would ensure expeditious implementation through the permit if a TMDL were to be developed.

2. Compliance with Water Quality Standards

Part III.B of the proposed permit requires, to the maximum extent practicable, that the discharges not cause or contribute to an exceedance of applicable water quality standards. As noted in section I.A of this fact sheet, Region 9 has discretion under the CWA regarding compliance with water quality standards for MS4s.

The Phase II regulations at 40 CFR 122.34(e) recommend that the requirements of first round small MS4 permits not go beyond the six minimum measures discussed in section II.A of the fact sheet (unless additional controls are required by a TMDL). However, Region 9 also wishes to ensure that (as necessary) all practicable steps are implemented to achieve compliance with standards. If the discharges are found to cause or contribute to exceedances of standards, Part III.D.3 of the proposed permit includes an iterative process in which Region 9 could require that additional BMPs be proposed to prevent future exceedances, to the maximum extent practicable. Any additional BMPs would still have to be practicable and within the scope of the BMPs envisioned for the six minimum measures; as such, the permit would be consistent with the recommendations of 40 CFR 122.34(e). But by focusing extra attention on any exceedances of standards which may occur, the iterative process should maximize the chances for achieving compliance.

3. Threatened and Endangered Species

NPDES regulations at 40 CFR 122.49 require that EPA ensure compliance with other applicable Federal laws, including the Endangered Species Act (ESA), which may apply when issuing NPDES permits. The CNMI permit application includes a current list of threatened and endangered species for CNMI. The principal threats to the species which may be associated with permitted storm water discharges are potential loss or modification of habitat and materials such as pesticides and other pollutants in the discharges.

Region 9 has added one condition to the proposed permit to ensure that endangered or threatened species would not be adversely affected by the permit issuance. As noted earlier, structural storm water controls (such as detention basins) must be included, as appropriate, in

new developments in accordance with minimum measure #5 for a SWMP. However, the construction of such controls may also adversely affect the habitat of endangered or threatened species. To address this issue, Part III.C was included in the proposed permit which provides that in complying with the requirements of the permit, the permittee need not construct any structural storm water controls which could adversely affect endangered or threatened species.

With the special condition discussed above, Region 9 believes that the permit issuance will have no effect on listed species. Region 9 has forwarded a copy of the draft permit and fact sheet to the local offices of the U.S. Fish and Wildlife Service and the National Marine Fisheries Service for review and comment on Region 9's conclusions concerning the effects of the proposed permit on listed species.

G. Monitoring, Recordkeeping, and Reporting Requirements

1. Monitoring Requirements

The Phase II storm water regulations at 40 CFR 122.34(g) require that small MS4s evaluate program compliance, the appropriateness of the BMPs in their SWMPs and progress towards meeting their measurable goals. These requirements have been included in Part IV.A of the proposed permit.

For Phase II MS4s, EPA is not encouraging a focus on the traditional end-of-pipe monitoring which is commonly found in most NPDES permits (64 Fed. Reg. 68769). Instead, EPA is encouraging a mix of physical, chemical, biological, or programmatic indicators such as described in Claytor and Brown (1996). In 1994, EPA co-sponsored a conference in Crested Butte, CO (ASCE, 1995) to consider storm water monitoring needs and how to obtain the most meaningful results based on limited monitoring dollars. A general conclusion from the conference was that a mix of various types of indicators should be considered when designing storm water monitoring programs.

The nature of the monitoring activities which will be implemented by Phase II MS4s largely depends on the measurable goals selected by the permittees. The measurable goals proposed by the CNMI Department of Public Works consist of various levels of effort in implementing the BMPs in the SWMP. As such, the monitoring activities of this permittee will largely consist of keeping track of these efforts. Region 9 believes this is reasonable, at least for the first term of the permit, given the complexities of other types of monitoring. The information which is collected must be submitted to Region 9 in the annual report described below in section II.G.3.

If monitoring activities such as chemical monitoring are conducted by the permittee, Part IV.A.2 of the proposed permit includes additional requirements related to representative monitoring, test procedures and reporting of results. As noted in section II.F.1, chemical or other types of monitoring may be required by the permit in accordance with the requirements of TMDLs which may be established in the future.

2. Recordkeeping

In accordance with 40 CFR 122.34(g)(2), Part IV.B of the proposed permit requires that records required by the permit be retained by the permittee for at least three years. In addition, in accordance with these same regulations, the permit requires that the permittee make these records (including the SWMP) available to the public during regular business hours.

3. Reporting

In accordance with 40 CFR 122.34(g)(3), Part IV.C of the proposed permit requires the submittal of an annual report to the permitting authority. The following information is required:

a. The status of compliance with permit conditions, an assessment of the appropriateness of the identified best management practices and progress towards achieving the identified measurable goals for each of the minimum control measures. The status report shall include available information concerning whether any of the permittee's discharges caused or contributed to any exceedances of water quality standards and the circumstances leading to the exceedances.

b. Results of information collected and analyzed, including monitoring data, if any, during the reporting period;

c. A summary of the storm water activities which are planned during the next reporting cycle;

d. A change in any identified measurable goals that apply to the program elements; and

e. Description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs.

f. Notice that the permittee is relying on another government entity to satisfy some of the permit obligations (if applicable).

The first report is due September 30, 2007, covering the activities of the permittee during the period beginning on the effective date of the permit and ending June 30, 2007. Subsequent annual reports are due on September 30 of each year following 2007 during the remainder of the term of the permit.

III. Standard Permit Conditions

NPDES regulations at 40 CFR 122.41 and 122.42 require the inclusion of certain standard conditions in all NPDES permits. Region 9 normally includes these conditions in all NPDES permits, and we also include certain other basic conditions which set forth additional requirements of the CWA.

However, based on experiences with Phase I MS4 permits in Arizona, Region 9 has made certain relatively minor modifications or deletions to the list of standard conditions for clarity and in consideration of the unique nature of storm water discharges. The revised conditions are included in the proposed permit for the CNMI Department of Public Works. We do not believe

that these modifications significantly affect the intent of the standard conditions. Additional information about the modifications may be found in the administrative record for the Arizona Phase I MS4 permits.

The standard conditions which are proposed for the small MS4 permit are found in Part VI of the proposed permit.

IV. Expiration Date of the Proposed Permit

The expiration date of the proposed permit is five years after the effective date. Since the permit is expected to be issued in early 2006 (shortly after the close of the public comment period), the expiration date is expected to be early 2011.

Appendix A. References

ASCE. 1995. Harry C. Torno, Editor, Stormwater NPDES Related Monitoring Needs, Proceedings of an Engineering Foundation Conference.

Center for Watershed Protection. 1996. Environmental Indicators to Assess Stormwater Control Programs and Practices, Final Report, July, 1996.

CNMI DEQ, 2004. Commonwealth of the Northern Mariana Islands integrated 305(b) and 303(d) water quality assessment report, May, 2004.

EPA. 1983. Results of the Nationwide Urban Runoff Program, Final Report, Water Planning Division.

EPA. 1994. Clinton's Clean Water Initiative, EPA 800-R-94-001, February 1, 1994.

EPA. 1995. Storm Water Discharges Potentially Addressed by Phase II of the National Pollutant Discharge Elimination System Storm Water Program, EPA 833-K-94-002, March, 1995.

EPA. 2000. Storm Water Phase II Compliance Assistance Guide, EPA 833-R-00-002, March, 2000.

EPA. 2002. National Water Quality Inventory: 2000 Report, EPA 841-R-02-001, August, 2002.

Appendix B. Regulatory Requirements and Guidance for SWMPs for Phase II MS4s

The six minimum control measures for SWMPs are listed below, broken down into the required components and the guidance from the Phase II regulations (40 CFR 122.34):

1. Public Education and Outreach on Storm Water Impacts.

a. SWMP Must Include:

(1) Implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

b. EPA Guidance on Public Education and Outreach:

(1) use storm water educational materials provided by your State, Tribe, EPA, environmental, public interest or trade organizations, or other MS4s;
(2) inform individuals and households about the steps they can take to reduce storm water pollution, such as ensuring proper septic system maintenance, ensuring the proper use and disposal of landscape and garden chemicals including fertilizers and pesticides, protecting and restoring riparian vegetation, and properly disposing of used motor oil or household hazardous wastes;
(3) inform individuals and groups how to become involved in local stream and beach restoration activities as well as activities that are coordinated by youth service and conservation corps or other citizen groups;
(4) tailor the program, using a mix of locally appropriate strategies, to target specific audiences and communities. Program should target some of the materials or outreach programs to be directed toward targeted groups of commercial, industrial, and institutional entities likely to have significant storm water impacts. For example, providing information to restaurants on the impact of grease clogging storm drains and to garages on the impact of oil discharges;
(5) tailor the outreach program to address the viewpoints and concerns of all communities, particularly minority and disadvantaged communities, as well as any special concerns relating to children.

2. Public Involvement/Participation.

a. SWMP Must Include:

(1) at a minimum, comply with State, Tribal and local public notice requirements when implementing a public involvement/participation program.
b. EPA Guidance:

(1) include the public in developing, implementing, and reviewing your storm water management program and should make efforts to reach out and engage all economic and ethnic groups. Opportunities for members of the public to participate in program development and implementation include serving as citizen representatives on a local storm water management panel, attending public hearings, working as citizen volunteers to educate other individuals about the program, assisting in program coordination with other pre-existing programs, or participating in volunteer monitoring efforts. (Citizens should obtain approval where necessary for lawful access to monitoring sites.)

3. Illicit discharge detection and elimination.

a. SWMP Must Include:

(1) develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at 40 CFR 122.26(b)(2)) into the small MS4;
(2) develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;
(3) to the extent allowable under State, Tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into the storm sewer system and implement appropriate enforcement procedures and actions;
(4) develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the system;
(5) inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste; and
(6) address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if they are identified by the MS4 as significant contributors of pollutants to the small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the United States).

It should also be noted that the fire fighting activities referred to above, from which discharges need not necessarily be prohibited, are emergency situations only and do not include non-emergency situations such as fire fighting training activities.

b. EPA Guidance:

(1) ensure that the plan to detect and address illicit discharges include the following four components: procedures for locating priority areas likely to have illicit discharges; procedures for tracing the source of an illicit discharge; procedures for removing the source of the discharge; and procedures for program evaluation and assessment.
(2) conduct visual screening of the outfalls during dry weather and conduct field tests of selected pollutants as part of the procedures for locating priority areas.

4. Construction Site Storm Water Runoff Control.

a. SWMP Must Include:

(1) develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the NPDES permitting authority waives requirements for storm water discharges associated with small construction activity in accordance with 40 CFR 122.26(b)(15)(i), the MS4 is not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites.

The program must include the development and implementation of, at a minimum:

(a) an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;
(b) requirements for construction site operators to implement appropriate erosion and sediment control best management practices;
(c) requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
(d) procedures for site plan review which incorporate consideration of potential water quality impacts;
(e) procedures for receipt and consideration of information submitted by the public; and
(f) procedures for site inspection and enforcement of control measures.

b. EPA Guidance:

(1) consider as examples ensure compliance - non-monetary penalties, fines, bonding requirements and/or permit denials for non-compliance;
(2) include procedures for site plan review including the review of individual pre-construction site plans to ensure consistency with local sediment and erosion control

requirements;
(3) include procedures for site inspections and enforcement of control measures including steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water quality; and
(4) provide educational and training measures for construction site operators, including requiring a storm water pollution prevention plan for construction sites within the jurisdiction that discharge into the system.

5. Post-Construction Storm Water Management in New Development and Redevelopment.

a. SWMP Must Include:

(1) develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the small MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts;
(2) develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for the community; and
(3) use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal or local law; and
(4) ensure adequate long-term operation and maintenance of BMPs.

b. EPA Guidance:

(1) ensure that the BMPs chosen are appropriate for the local community; minimize water quality impacts; and attempt to maintain pre-development runoff conditions;
(2) in choosing appropriate BMPs, participate in locally-based watershed planning efforts which attempt to involve a diverse group of stakeholders including interested citizens. When developing a program that is consistent with this measure's intent, EPA recommends that the MS4 adopt a planning process that identifies the municipality's program goals (e.g., minimize water quality impacts resulting from post-construction runoff from new development and redevelopment), implementation strategies (e.g., adopt a combination of structural and/or non-structural BMPs), operation and maintenance policies and procedures, and enforcement procedures;
(3) in developing your program, consider assessing existing ordinances, policies, programs and studies that address storm water runoff quality. In addition to assessing these existing documents and programs, the MS4 should provide opportunities to the public to participate in the development of the program;
(4) ensure the appropriate implementation of the structural BMPs by considering some or all of the following: re-construction review of BMP designs; inspections during

construction to verify BMPs are built as designed; post-construction inspection and maintenance of BMPs; and penalty provisions for the noncompliance with design, construction or operation and maintenance; and
(5) ensure that the requirements be responsive to the constantly changing storm water technologies, developments or improvements in control technologies.

6. Pollution Prevention/Good Housekeeping for Municipal Operations.

a. SWMP Must Include:

(1) develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations; and
(2) using training materials that are available from EPA, your State, Tribe, or other organizations, the program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

b. EPA Guidance:

(1) at a minimum, consider the following in developing the program:

(a) maintenance activities, maintenance schedules, and long-term inspection procedures for structural and non-structural storm water controls to reduce floatables and other pollutants discharged from the separate storm sewers;
(b) controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas operated by the MS4, and waste transfer stations;
(c) procedures for properly disposing of waste removed from the separate storm sewers and areas listed above (such as dredge spoil, accumulated sediments, floatables, and other debris); and
(d) ways to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices; and
(2) include operation and maintenance as an integral component of all storm water management programs. This measure is intended to improve the efficiency of these programs and require new programs where necessary.